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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,914

11/15/2005

Kaoruko Urai

URAI5

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EXAMINER

SIMMONS, CHRIS E

ART UNIT

PAPER NUMBER

1612

MAIL DATE

DELIVERY MODE

07/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/556,914	<b>Applicant(s)</b> URAI ET AL.	
	<b>Examiner</b> CHRIS E. SIMMONS	<b>Art Unit</b> 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-6, 8-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) 8-13, 16, 17 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-6, 18 and 19 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/15/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of titanium oxide as the auxiliary component in the reply filed on 05/01/2009 is acknowledged. The traversal is on the ground(s) that the species are not mutually exclusive as required by MPEP § 806.04(f) because it is possible to have more than 1 auxiliary component in the composition. Applicant asserts that this is not a situation where one auxiliary component is present to the exclusion of all others. This is not found persuasive because it is also possible for the composition to only contain 1 auxiliary component to the exclusion of all others since in claim 1 the composition can be limited to one auxiliary component. Additionally, 1 claim contains limitations for a first but not a second species while a second claim contains limitations of a second species and not the first. For example, claim 12 contains the presence of a tackifier and does not contain any limitation regarding a pigment, while claim 6 contains the presence of pigment at 1 - 20% wt. and does not contain any limitation regarding a tackifier.

Claims 8-13, 16, 17 and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected subject matter, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 05/01/2009.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Objections***

Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 4 contains the shellac and rosin in a range of 10 to 31% by weight. However, it depends from claim 2 which limits the shellac and rosin in a range of 1 to 30% by weight. The 31% in claim 4 does not fall within the limitation of 1 to 30% in claim 2.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 18 are rejected under 35 U.S.C. 102(b) as being anticipation by US 5,213,615.

The reference teaches a dental material and method for the control of caries and paradentitis. Example I, at column 4, lines 52-60, 3 g of colophony (i.e., 30% rosin) is placed in a flask and mixed with 6 ml of pure 96% ethanol, and thereafter, the flask is sealed and shaken for 24 hours until the colophony is completely dissolved. 2 ml of distilled water is added to the solution, followed by 0.1 g of thymol, 0.02 g of

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chlorhexidine (antibacterial agent) and 0.01 g of sodium fluoride, and the mixture is again sealed and shaken until the agents are completely dissolved.

Carrier materials for dental varnishes may also include shellac which can be dissolved in a solvent and become hard after evaporation of the solvent (col. 4, ll. 17).

Claims 1, 5, 6 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2002/0119105.

The reference teaches tooth coating compositions containing shellac, a solvent of the shellac, and mica titanium as the main constituents. The particularly preferred content of shellac is from 5% by weight to 15% by weight. When the shellac resin is less than 1%, the composition is too brittle for tooth coating and when it is above 20%, it is too viscous to thinly coat the tooth and has inferior drying properties [0012]. One embodiment teaches a composition comprising 12% shellac (Example 4). In addition to shellac as the coat-forming component, one kind or a combination of two or more kinds of other resins (e.g., rosin; [0014]), high molecular materials, and dental cements can be added to the composition at a suitable amount. Such material provides improved luster of the coat and more improved dispersion of mica titanium or pigments [0013]. Mica titanium is a substance obtained by coating a mica powder with a thin film of titanium oxide [0017]. A particularly preferred compounding amount of mica titanium is from 2% by weight to 15% by weight of the whole composition [0018].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0119105 in view of 5,213,615.

The references are described above. The primary reference does not expressly teach rosin at the claimed concentrations. The secondary reference does not expressly teach the claimed concentrations of rosin and shellac.

It would have been obvious to one of ordinary skill in the art to adjust the concentrations of rosin in the primary reference to concentrations disclosed in the secondary reference, e.g., 30%; it would also have been obvious to adjust the concentration of the rosin to amounts instantly claimed. The motivation would have been to optimize the luster of the coat and more improved dispersion of mica titanium or pigments by optimizing the amounts of the "other resin" as disclosed in the primary reference [0014].

### ***Conclusion***

No claims are allowed.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS E. SIMMONS whose telephone number is (571)272-9065. The examiner can normally be reached on Monday - Friday from 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. E. S./  
Examiner, Art Unit 1612

/Frederick Krass/  
Supervisory Patent Examiner, Art Unit 1612